

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 95-150

SEWER AUTHORITY MID-COASTSIDE
CITY OF HALF MOON BAY
MONTARA SANITARY DISTRICT
GRANADA SANITARY DISTRICT
HALF MOON BAY, SAN MATEO COUNTY

REQUIRING SEWER AUTHORITY MID-COASTSIDE TO CEASE AND DESIST
DISCHARGING WASTE CONTRARY TO DISCHARGE PROHIBITIONS IN ORDER NO.
94 - 126 (NPDES PERMIT)

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Sewer Authority Mid-Coastside (hereinafter referred to as SAM) was formed by the City of Half Moon Bay, Granada Sanitary District, and Montara Sanitary District in a Joint Exercise of Powers Agreement dated February 3, 1976, to perform all functions for the treatment and disposal of wastewater. These four entities are collectively referred to hereinafter as the discharger.
2. On September 21, 1994, the Board adopted Order No. 94-126 (NPDES Permit No. CA0038598) prescribing waste discharge requirements for SAM.
3. The discharger operates a water pollution control plant located at 1000 N. Cabrillo Highway, Half Moon Bay. The plant is permitted to discharge 2.0 MGD (daily average) and currently discharges about 1.5 MGD of treated wastewater effluent into the Pacific Ocean. The wastewater is discharged west of Pilarcitos Creek through a submerged diffuser about 1900 feet offshore at a depth of 37 feet below mean lower low water, with an initial dilution ratio of 119:1. The wastewater is discharged directly into Monterey Bay National Marine Sanctuary.
4. Prior to adoption of Order No. 94-126, the discharger was subject to NPDES Permit CA0038598 (Order No. 89-148, adopted September 20, 1989).
5. Between September 20, 1989 and February 28, 1995, the discharger had significant violations of their NPDES permit for exceeding the settleable matter, BOD, total suspended solids, coliform, chlorine residual effluent limits, and violations of Discharge Prohibition 2 of Order 89-148, which states: "The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from any of the collection or transport system or pump stations tributary to the treatment plant

or outfall is prohibited." The violations totaled up to 576 days (see Table 1, Chart 2 and Chart 3 for more details).

6. The violations are mainly a result of design limitations of the secondary clarifiers resulting in reduced solids retention capacity during peak flow periods. Peak flow periods result from weekends when the influx of tourists increases the amount of flow into the treatment plant and during major storm events when large amounts of infiltration enter into the sewer system. Any additional connections into the treatment plant would exacerbate the violations.
7. The treatment plant has a limited hydraulic capacity of 2.0 MGD. In order to accommodate the peak flows and protect the treatment units, the treatment plant occasionally bypasses a portion of the flow around the secondary treatment. In addition, even if all of the wastewater passes through the secondary treatment, inadequate retention time may result in settleable matter limit violations.
8. Based on the past data, it is anticipated that the discharger will immediately be out of compliance with Provision B.1.d (limits for Settleable Matters - 0.1 ml/l-hr monthly average and 0.2 ml/l-hr instantaneous maximum) and Prohibition #1 (no bypass) of Order 94-126. As a result, an interim limit for Settleable Matter (0.3 ml/l-hr monthly average and 0.6 ml/l-hr for daily average) and a 3 year compliance schedule was included in Order 94-126. SAM violated the interim limit for settleable matter 11 times between October 1994 and February 1995.
9. On October 31, 1994, Board staff issued a Notice of Violations Letter informing SAM that it is discharging in violation of its NPDES permit.
10. In response to the Notice of Violations, SAM responded with a letter dated October 17, 1994. In the letter, SAM included a list of short term and long term improvements. The proposed improvements include chemical addition, flow equalization, improved waste activated sludge pump control, secondary clarifier traveling bridge siphon improvements, secondary clarifier high sludge blanket level alarm, treatment plant expansion and Inflow/Infiltration prevention programs. The items in the proposal are included in this order.
11. The discharger has started to divert primary clarifier effluent from the secondary treatment process to a decant tank and one of the primary clarifier tanks during peak flow periods in order to reduce the hydraulic load on the secondary system and avoid bypasses of secondary treatment
12. Polymer is being added to the secondary clarifiers during peak flow periods to assist in flock formation and in settling of solids.

13. Section 13301 of the California Water Code authorizes the Board to issue a Cease and Desist Order when it finds that a waste discharge is taking place or threatening to take place in violation of the Board's prescribed requirements.
14. This Cease and Desist Order specifies an interim effluent limit for settleable matter. Additionally, this Cease and Desist Order requires the discharger to implement a feasibility study for phased construction, a collection system inflow/infiltration prevention program, a list of short term improvements and a treatment plant expansion.
15. If SAM fails to comply with the provisions and time schedules of this Order or if additional effluent limit violations occur, the Board will consider amending this Order to include a prohibition on additional discharges to the sewer system pursuant to state regulations.
16. This action is an order to enforce waste discharge requirements adopted by the Board and is categorically exempt from CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
17. The discharger and interested persons have been notified of the Board's intent to adopt the enforcement order, and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT, the Discharger shall cease and desist from violating waste discharge requirements contained in Order No. 94-126 as follows:

1. Interim Limit: Immediately upon adoption of this Order, comply with following interim effluent limitation for Waste 001 as discharged:

<u>Constituent</u>	<u>Unit</u>	<u>Monthly Average</u>	<u>Daily Average</u>
Settleable Matter	ml/l-hr	0.3	0.6

The interim limit established in this Order shall supersede the limit established in Order No. 94-126.

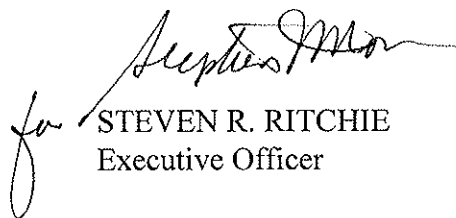
2. Compliance with all effluent limitations shall be achieved in accordance with the time schedules and interim measures described in Attachment 1. Full compliance with the final settleable matter effluent limit in Order No. 94-126 shall be achieved by January 31, 1999.
3. Compliance with Prohibition A.1 (No Bypasses) of Order 94-126 shall be achieved in accordance with the time schedules and interim measures described in Attachment 1. Full compliance with Prohibition A.1 shall be achieved by January 31, 1999.

4. The existing treatment facility, as designed, has a limited ability to handle peak flows. During influent flow conditions ranging from 3.0 to 4.5 mgd, a portion of the primary effluent flow must be diverted around the secondary treatment system to the chlorine contact tank to prevent wash-out of biological solids from the secondary clarifiers. During influent flow conditions exceeding 4.5 mgd, it is necessary to shut down the aeration basin blowers to allow biological solids to settle to prevent loss from the secondary clarifiers. During these conditions, plant effluent is typically a blend of primary and secondary effluent which is disinfected and dechlorinated prior to discharge through the ocean outfall.

Operation of the treatment plant in the manner described above during peak flow events will not be considered as a violation of Order No. 94-126. Bypass at flows less than 3.0 MGD is prohibited. Continued on going efforts by SAM agencies to reduce infiltration and inflow within the collection systems and the inclusion of appropriate design features in the expansion project will significantly reduce or eliminate such inplant diversions after January 31, 1999. During all bypasses, SAM shall meet all effluent limitations established in Order No. 94-126 and Order No. 95-150.

5. If, in the opinion of the Executive Officer, Sewer Authority Mid-Coastside fails to comply with the provisions of this order, the Executive Officer is directed to take further enforcement action or to request the Attorney General to take an enforcement action against the discharger, in accordance with Sections 13331, 13350, 13385, and 13386 of the California Water Code. This would include an injunction and civil monetary penalties, if appropriate.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 19, 1995.


for STEVEN R. RITCHIE
Executive Officer

Attachment 1 (Time Schedule)
Attachment 2 (SWPPP Guideline)
Chart 1&2
Table 1

Attachment 1, Order No. 94 - 150
Sewer Authority Mid-Coastside

The following measures are designed to achieve compliance with the Discharger's NPDES permit (Effluent concentration and no bypass requirement). All measures are required to be continued until the discharger fully complies with the effluent limits and bypass prohibitions. The Board will decide which measures should be continued beyond that date.

I. Short Term Improvements

- A. *Chemical addition to enhance solids removal.*
- B. *Peak flow diversion.* To the extent possible partially treated primary effluent should be diverted to a storage tank(s) during peak flow periods and processed during low flow periods in order to minimize the hydraulic loading on the secondary treatment system.

The discharger shall submit a proposal acceptable to the Executive Officer. The proposal shall include the type of chemical proposed to be used, the volume of flow needed to be diverted in order to avoid bypass, the costs of implementing these measures and the feasibility of implementation. The discharger shall also submit a technical report acceptable to the Executive Officer documenting the implementation of the above proposal.

Proposal Due:	August 31, 1995
SAM Shall Implement the Proposed Chemical Addition and Flow Diversion/ Flow Equalization Plan By:	October 30, 1995
Technical Report Due:	November 30, 1995

II. Long Term Improvements

- A. *Collection system inflow/ infiltration prevention programs.* The discharger shall submit a proposal acceptable to the Executive Officer on the Inflow/Infiltration (I/I) reduction program completed to date and the future plans proposed by SAM's member agencies to reduce inflow and infiltration. The discharger shall also submit a technical report acceptable to the Executive Officer documenting the implementation of the above plan.

Proposal Due:	August 31, 1995
SAM Shall Implement the Proposed I/I Plan By:	October 30, 1995
Technical Report Due:	November 30, 1995

B. *Treatment Plant Expansion.* The discharger shall achieve compliance with the discharge prohibitions and effluent limitations of Order 94-126 according to the following time schedule. For each of the tasks listed below, a technical report acceptable to the Executive Officer shall be submitted on the required date, documenting completion of the task.

1. Feasibility Report for Phased Construction. The report shall address the feasibility of constructing the plant expansion project using a phased approach.

Report Due: October 1, 1995

2. General Progress Report. The General Progress Report shall include amount of funding secured, progress of bidding, and number of permits required and obtained.

Report Due: January 1, 1996

3. Stormwater Pollution Prevention Plan (SWPPP) for the construction. A SWPPP shall be submitted following the attached guideline (Attachment 2).

Report Due: November 1, 1995

4. Bid Advertisement. A copy of the bid advertisement shall be submitted.

Report Due: March 31, 1996

5. Start Construction. This report shall include actual starting date of construction. Start construction is defined as having awarded the construction contract, having the contractor mobilized on site, and having work begun on the treatment plant expansion.

SAM Shall Start Construction By: September 1, 1996

Report Due: October 1, 1996

6. Interim Reports. There shall be five interim reports that detail construction sections completed, problems encountered, and problems discharger might encounter.

Reports Due:

February 1, 1997
June 1, 1997
October 1, 1997
February 1, 1998
June 1, 1998

7. Final Report. The discharger shall submit a report acceptable to the Executive Officer on the completion of the treatment plant, compliance with all effluent limits, and the problems with the operations.

SAM Shall Complete Construction By: November 30, 1998
SAM Shall Start-up the Plant By: December 31, 1998
SAM Shall Achieve Total Effluent Limit
Compliance By: January 31, 1999
Report Due: January 31, 1999

ATTACHMENT 2

Section A: STORM WATER POLLUTION PREVENTION PLAN

1. Objectives

A Storm Water Pollution Prevention Plan (SWPPP) shall be developed and implemented for each construction site covered by this general permit. The SWPPP shall be certified in accordance with the signatory requirements of Standard Provision C.9. The SWPPP shall be developed and amended, when necessary, to meet the following objectives:

- a. To identify pollutant sources that may affect the quality of discharges of storm water associated with construction activity (storm water discharges) from the construction site, and
- b. To identify, construct, and implement storm water pollution prevention measures (control practices) to reduce pollutants in storm water discharges from the construction site both during construction and after construction is completed.

2. Implementation Schedule

- a. For construction activity commencing on and after October 1, 1992, the SWPPP must be developed and implemented concurrent with commencement of construction activities.
- b. For construction activity commencing prior to and continuing beyond October 1, 1992, the SWPPP must be developed and implemented by October 1, 1992.
- c. For ongoing construction activity involving a change of ownership of property covered by this general permit, the new owner must accept and maintain the existing SWPPP.

3. Availability

The SWPPP shall be kept on site during construction activity and made available upon request of a representative of the Regional Water Board and/or local agency.

4. Required Changes

- a. The discharger shall amend the SWPPP whenever there is a change in construction or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, or a municipal separate storm sewer system. The SWPPP should also be amended if it is in violation of any condition of this general permit or has not achieved the general objective of reducing pollutants in storm water discharges.
- b. The Regional Water Board, or local agency with the concurrence of the Regional Water Board, may require the discharger to amend the SWPPP.

5. Source Identification

The SWPPP shall provide a description of potential sources which are likely to add significant quantities of pollutants to storm water discharges or which may result in non-storm water discharges from the construction site. The SWPPP shall include, at a minimum, the following items:

- a. A map extending approximately one-quarter mile beyond the property boundaries of the construction site showing: the construction site, surface water bodies (including known springs and wetlands²), known wells, an outline of off-site drainage areas that discharge into the construction site, general topography, and the anticipated discharge location(s) where the construction site's storm water discharges to a municipal storm sewer system or other water body. The requirements of this paragraph may be included in the site map required under the following paragraph if appropriate.
- b. A site map(s) showing:
 - i. Location of control practices used during construction;
 - ii. Areas used to store soils and wastes;
 - iii. Areas of cut and fill;
 - iv. Drainage patterns and slopes anticipated after major grading activities are completed;
 - v. Areas of soil disturbance;
 - vi. Surface water locations;
 - vii. Areas of potential soil erosion where control practices will be used during construction;
 - viii. Existing and planned paved areas and buildings;
 - ix. Locations of post-construction control practices;
 - x. An outline of the drainage area for each on-site storm water discharge point;
 - xi. Vehicle storage and service areas; and
 - xii. Areas of existing vegetation.

²The determination of whether wetlands exist shall be made by the person who prepares the SWPPP and shall not be binding upon any other person.

c. A narrative description of the following:

- i. Toxic materials that are known to have been treated, stored, disposed, spilled, or leaked in significant quantities onto the construction site;
 - ii. Practices to minimize contact of construction materials, equipment, and vehicles with storm water;
 - iii. Construction material loading, unloading, and access areas;
 - iv. Preconstruction control practices (if any) to reduce sediment and other pollutants in storm water discharges;
 - v. Equipment storage, cleaning, and maintenance areas;
 - vi. Methods of on-site storage and disposal of construction materials; and
 - vii. The nature of fill material and existing data describing the soil on the construction site.
- d. A list of pollutants (other than sediment) that are likely to be present in storm water discharges in significant quantities. Describe the control practices (if different from Item 6 below) appropriate to reduce these pollutants in the storm water discharges.
- e. An estimate of the size of the construction site (in acres or square feet), an estimate of the runoff coefficient of the construction site before and after construction, and an estimate of the percentage of the area of the construction site that is impervious (e.g., pavement, buildings, etc.) before and after construction.
- f. A copy of the NOI.

6. Erosion and Sediment Control

The SWPPP shall include:

- a. A description of soil stabilization practices. These practices shall be designed to preserve existing vegetation where feasible and to revegetate open areas as soon as feasible after grading or construction. In developing these practices, the discharger shall consider: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, protection of trees, or other soil stabilization practices. At a minimum, the operator must implement these practices on all disturbed areas during the rainy season.
- b. A description or illustration of control practices which, to the extent feasible, will prevent a net increase of sediment load in

storm water discharge. In developing control practices, the discharger shall consider a full range of erosion and sediment controls such as detention basins, straw bale dikes, silt fences, earth dikes, brush barriers, velocity dissipation devices, drainage swales, check dams, subsurface drain, pipe slope drain, level spreaders, storm drain inlet protection, rock outlet protection, sediment traps, temporary sediment basins, or other controls. At a minimum, sandbag dikes, silt fences, straw bale dikes, or equivalent controls practices are required for all significant sideslope and downslope boundaries of the construction area. The discharger must consider site-specific and seasonal conditions when designing the control practices.

- c. Control practices to reduce the tracking of sediment onto public or private roads. These public and private roads shall be inspected and cleaned as necessary.
- d. Control practices to reduce wind erosion.

7. Non-Storm Water Management

The SWPPP shall include provisions which eliminate or reduce to the extent feasible the discharge of materials other than storm water to the storm sewer system and/or receiving waters. Such provisions shall ensure, to the extent feasible, that no materials are discharged in quantities which will have an adverse effect on receiving waters. Materials other than storm water that are discharged shall be listed along with the estimated quantity of the discharged material.

8. Post-Construction Storm Water Management

The SWPPP shall describe the control practices to reduce pollutants in storm water discharges after all construction phases have been completed at the site. These must be consistent with all local post-construction storm water management requirements, policies, and guidelines. The discharger must consider site-specific and seasonal conditions when designing the control practices. Operation and maintenance of control practices after construction is completed shall be addressed, including short- and long-term funding sources and the responsible party.

9. Waste Management and Disposal

All wastes (including equipment maintenance waste) disposed at the site or removed from the site for disposal shall be disposed of in compliance with Federal, State, and local laws, regulations, and ordinances.

10. Maintenance, Inspection, and Repair

The SWPPP shall include maintenance, inspections, and repair procedures to ensure that all grade surfaces, walls, dams and structures, vegetation, erosion and sediment control measures, and other protective

devices identified in the site plan are maintained in good and effective condition and are promptly repaired or restored.

11. Training

The SWPPP shall include procedures to ensure that all inspections required in Section B.4 of the Monitoring Program and Reporting Requirements of this general permit and maintenance and repair required in Paragraph 10 of this Section are done by trained personnel.

12. List of Contractors/Subcontractors

The SWPPP shall include a list of all contractors (or subcontractors) responsible for implementing the SWPPP.

13. Other Plans

This SWPPP may incorporate, by reference, the appropriate elements of other plans required by local, State, or Federal agencies. A copy of any requirements incorporated by reference shall be kept at the construction site.

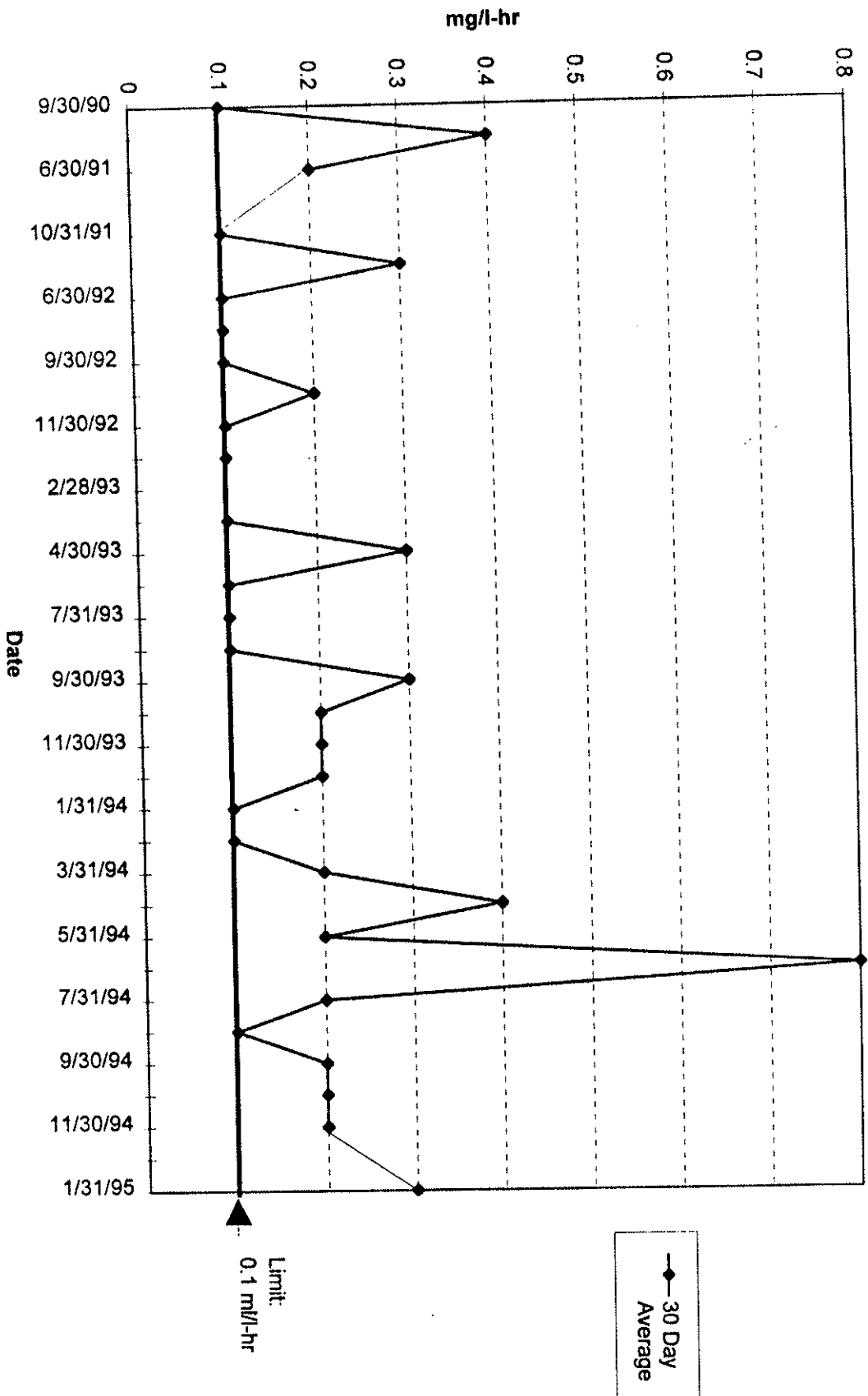
14. Public Access

The SWPPP is considered a report that shall be available to the public under Section 308(b) of the CWA. Upon request by members of the public, the discharger shall make available for review a copy of the SWPPP either to the Regional Water Board or directly to the requester.

15. Preparer

The SWPPP shall include the signature and title of the person responsible for preparation of the SWPPP and include the date of initial preparation and each amendment, thereto.

Settleable Matter - 30 Day Average



Settleable Matter - Instantaneous Max.

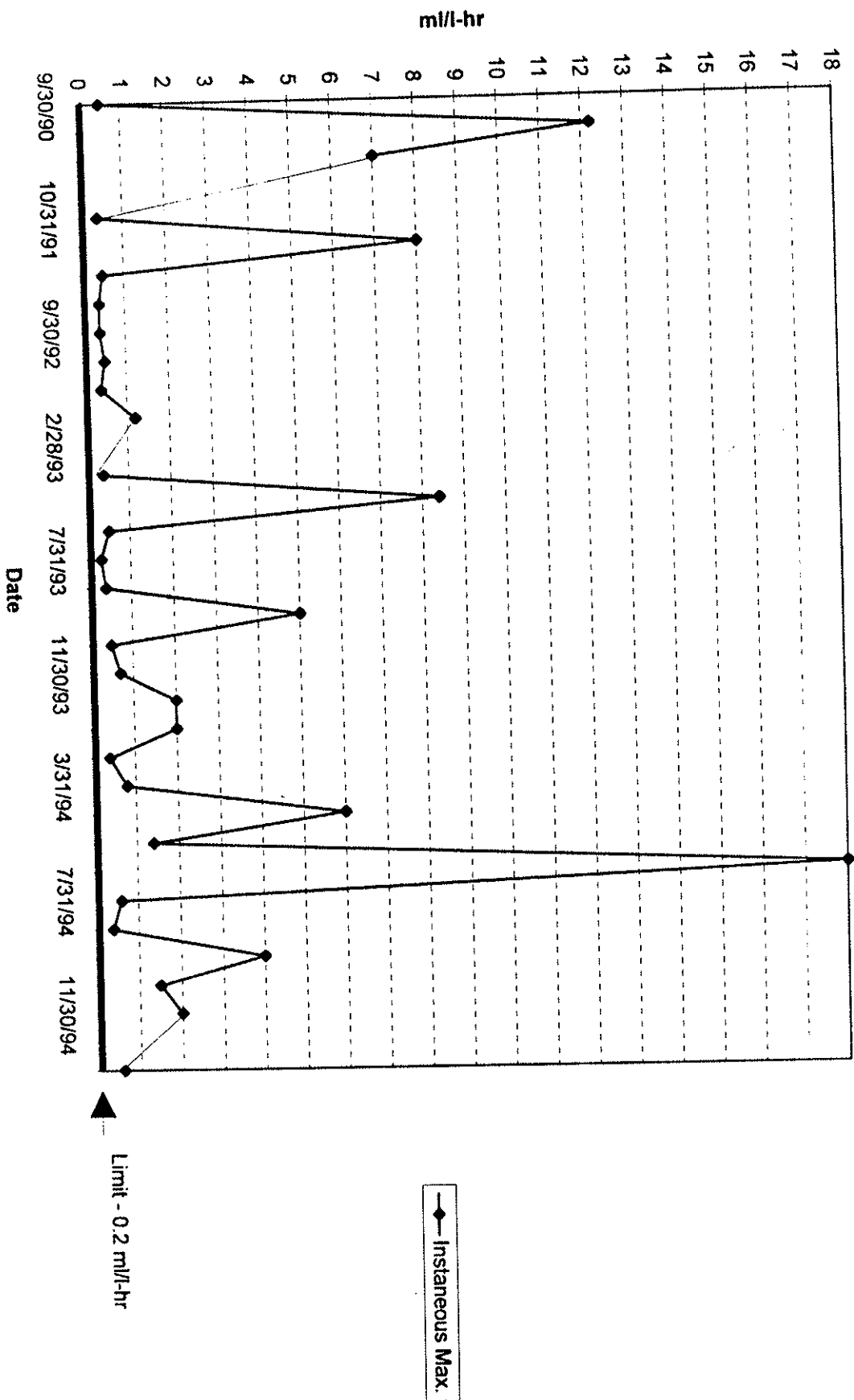


Table 1

	Settleable Matter	Settleable Matter	BOD	Total Suspended Solid	Coliform, Total	Coliform, Total	Chlorine Residual	Days of violation	Days of Bypass	Gallons of Bypass	Days of Violations with Bypass
Limits Date	30 Day Average (0.1 M/L-hr)	Instantaneous Max (0.2 M/L-hr)	Daily Max (60 mg/l)	Daily Max (60 mg/l)	Median (2400 MPN/100 ML)	Daily Max (2400 MPN/100 ML)	Instantaneous Max (0.0 mg/l)				
5/31/90							0.01	1			1
9/30/90	0.1	0.5						1			1
5/31/91	0.4	12.2						31			31
6/30/91	0.2	7						30			30
7/31/91					2770			1			1
10/31/91	0.1	0.4		67.7				1			1
2/29/92	0.3	8	79	121				28	4		28
6/30/92	0.1	0.5						1			1
8/31/92	0.1	0.4						1			1
9/30/92	0.1	0.4						1			1
10/31/92	0.2	0.5						31			31
11/30/92	0.1	0.4						1			1
1/31/93	0.1	1.2		88				7	6		7
2/28/93							0.1	1			1
3/31/93	0.1	0.4						1			1
4/30/93	0.3	8.4						30			30
6/30/93	0.1	0.5						1			1
7/31/93	0.1	0.3						1			1
8/31/93	0.1	0.4						1			1
9/30/93	0.3	5				160000		30			30
10/31/93	0.2	0.5						31			31
11/30/93	0.2	0.7						30			30
12/31/93	0.2	2						31			31
1/31/94	0.1	2						1	1	91000	2
2/28/94	0.1	0.4						1	5	2202000	6
3/31/94	0.2	0.8						31			31
4/30/94	0.4	6						30			30
5/31/94	0.2	1.4					2.8	31			31
6/30/94	0.8	18	61	94.3			4	30			30
7/31/94	0.2	0.6					1.5	31			31
8/31/94	0.1	0.4						1			1
9/30/94	0.2	4		73.9				30	1	45500	30
10/31/94	0.2	1.5		92.1	>24000			31	2	177000	31
11/30/94	0.2	2						30	5	934300	30
12/31/94					>24000			1	0	0	1
1/31/95	0.3	0.6	100	153	>24000			31	26	17177478	31
Total Days of Violations								570	50	20627278	576
Total Cost										\$211,972,780	\$5,760,000
Total Number of Violations	18	32	3	7	1	4	5				